

Acid Base Chemistry Unit Study Guide

1. Define the Arrhenius method for acids and bases:

2. Define the Bronsted-Lowery method for acids and bases:

3. Name the following compounds:



4. Circle the strong acids:

HF HCl HNO₃ H₂SO₃ H₂O

H₂S H₃PO₄ HNO₂ H₂SO₄ HBr

5. Circle the strong bases:

Ca(OH)₂ Al(OH)₃ Fe(OH)₂ LiOH

NaOH Ga(OH)₃ Mg(OH)₂ KOH

6. What is the pH of a 0.300M solution of HCl?

7. What is the pH if [H⁺] is 0.0500M?

8. What is the pH if [H⁺] is 3.3M?

9. Provide 3 properties of acids:

10. Provide 3 properties of bases:

11. $\text{NaOH} + \text{HCl} \longrightarrow$

You titrate 25.0 mL of acid with 34.32 mL of base. The concentration of the base is 0.150M. What is the concentration of the acid?



You titrate 40.0 mL of acid with 27.76 mL of base. The concentration of the base is 0.100M. What is the concentration of the acid?

13. Be able to perform a titration as part of the test.